

The State of the Rental Housing Market

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THE STATE OF THE RENTAL HOUSING MARKET: IMPLICATIONS FOR CMHC AND FEDERAL
GOVERNMENT HOUSING POLICY IN THE 1980's.

by

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I INTRODUCTION

In recent years the federal government has phased out its major forms of assistance to the rental housing market as the ARP subsidy programme and the MURB tax shelter have been allowed to expire. Nevertheless, many concerns continue to be expressed regarding the viability of the rental market left to itself and some observers believe an active federal government policy presence is required for the 1980's. The implication behind most contemporary pessimistic analyses of the rental housing market is that policy actions are required to overcome market failure. Depending on the commentator the required policy prescription may involve marginal stimuli to private investment or substantial public subsidies or direct public investment to substitute for a sick, if not comatose, private market.

This paper focuses upon a review of the evidence pertaining to the hypothesis that the price or supply response mechanism is malfunctioning in the rental market. We will begin by identifying the symptoms commonly associated with the diagnosis of a diseased rental market, then isolate and focus upon the questions which seem critical to an evaluation of the pathology of the market, review what we know and what remains ambiguous or unknown, apply the conclusions from this effort to the plausible demand scenarios of the 1980's and beyond, and draw from this analysis the apparent implications for federal government and CMHC housing policy in the 1980's.

In the process of examining the market failure issue we shall recognize that much of federal housing policy has historically been based upon other concerns and objectives, for example, income redistribution, stabilization of employment in the construction or raw material resource industries, replacing substandard units, stimulating homeownership and assisting groups whose needs are considered too specialized and of too small a scale to be feasibly served in

an effective manner by the private market. Attention will be given to the role of these objectives in influencing rental market performance in the past decade and their relevance to housing policy in the 1980's.

We begin with a catalogue of systemic complaints and the possible alternative diagnoses that may be consistent with these complaints.

II SYMPTOMS OF INADEQUATE FUNCTIONING OF THE RENTAL HOUSING MARKET

The major clinical symptoms of the apparently unhealthy rental housing market of recent years are well known. Perhaps the most critical symptom has been the unprecedentedly low level of vacancy rates in many Canadian housing markets. Questions are raised regarding the market's effectiveness in supplying rental housing because of the ubiquity and persistence of these low vacancy rates and because, despite the low vacancy rates, rents apparently have responded only sluggishly to this inventory shortfall and have lagged behind inflation rates generally and increases in operating costs and interest rates specifically. Perhaps because of this rental lag, rental housing starts are perceived as having been very low in relation to basic demand as well as in relation to rental production in the 1960's and early 1970's. Especially disconcerting to many policy analysts have been the perceived very low level of unsubsidized private market rental starts (completions).

At the same time there exists concern about inadequate levels of rent there also has been much anxiety expressed over rental housing affordability and suggestions that affordability and availability characteristics have deteriorated from tenants perspectives. While on the surface, decreasing affordability in conjunction with secular real rent declines suggests an income rather than a housing market problem, some analysts apparently believe there exists a cost structure problem in rental market supply which reflects some inherent market imperfections.

(1) Vacancy Rates

Table 1 displays the standard CMHC survey apartment vacancy rates for Canadian metropolitan areas. It has been generally considered that the equilibrium vacancy rate in the context of this series is about 3.0 percent. Thus, the vacancies reported during 1974-77 and 1981-82 are extraordinarily low. Moreover, a number of CMAs, notably Vancouver, Victoria, St. Johns, Calgary, Toronto, Saskatoon, Regina, Edmonton and Halifax have experienced vacancy rates well below 1% for extended periods of time and several cities have experienced times when the unoccupied rental inventory was virtually exhausted. Some offsets have been provided through single family houses and buildings with less than six units, illegal suites and condominium units which unintentionally become available for rental. However, a number of Canadian cities unquestionably have endured extraordinarily low vacant inventories.

The recent increase in vacancies (and unoccupied newly completed units) appears attributable to a slowing down of net household formation as a result of the 1981/82 recession and a bulge in supply reflecting units timed to qualify for MURB status prior to the expiration of that privileged tax shelter status. Nonetheless, many observers do not expect the private market to produce sufficient rental supply to prevent vacancies from falling back to very low levels. Thus, a recent B. C. Government report forecasts

"The rental market in the Lower Mainland is expected to tighten and by late 1984 vacancy rates will return to quite low levels."¹

and, for the Capital Region,

"A return to very low vacancy rates is likely by mid-1984 unless a significantly larger number of multiple units are started than what has been projected here."

Implicit in these projections is the expectation that rents will not rise sufficiently to stimulate rental housing starts in the absence of some substantial government assistance.

TABLE 1
Apartment Vacancy Rates for Canadian
CMAs; Semiannually
1970-1982
(percent)

1970	June	4.7	1977	Apr.	1.5
	Dec.	3.6		Oct.	2.2
1971	June	4.8	1978	Apr.	2.2
	Dec.	3.7		Oct.	3.0
1972	June	4.3	1979	Apr.	2.9
	Dec.	2.7		Oct.	2.8
1973	June	3.3	1980	Apr.	2.5
	Dec.	2.1		Oct.	2.1
1974	June	2.4	1981	Apr.	1.6
	Dec.	1.2		Oct.	1.2
1975	Apr.	1.2	1982	Apr.	1.3
	Oct.	1.2		Oct.	2.4
1976	Apr.	1.1	1983	Apr.	3.1
	Oct.	1.3			

Note: Covers Apartment Structures of Six Units and Over, Publicly and Privately Initiated.

Source: Canada Mortgage and Housing Corporation

(2) Rents

As can be seen from Table 2 the residential Rent component of the CPI increased only 68.7% over the period 1971-82 in contrast to an 162.5% increase in the CPI as a whole. Since it has been persuasively argued that the CPI overstated inflation in the 1970's, particularly due to its method of computing home ownership costs (McFadyen and Hobart: 1978), and since it

TABLE 2

The Residential Rent Component of the Consumer

Price Index and the CPI All Items Index

1971-1982

	Rent	% Change	All Items	% Change
1971	100.0		100.0	
1972	101.2	1.20%	104.8	4.80%
1973	102.6	1.38	112.8	7.63
1974	105.5	2.83	125.0	10.82
1975	111.1	5.31	138.5	10.80
1976	118.9	7.02	148.9	7.51
1977	126.3	6.22	160.8	7.99
1978	132.9	5.23	175.2	8.96
1979	138.9	4.51	191.2	9.13
1980	145.5	4.75	210.6	9.21
1981	154.8	6.39	236.9	12.49
1982	168.7	8.98	262.5	10.81

Source: CMHC, Canadian Housing Statistics, 1982 Table 87, p. 74, Ottawa, March 1983.

has also been contended that the Rent index has understated rental increases by attributing too much of rent increases to quality improvements (Loyns: 1972), it is virtually certain that this comparison exaggerates the extent to which residential rents lagged the inflation rate during the decade of the 1970's. Nonetheless, the discrepancy between the indices is so great as to corroborate the commonly held view that real rents declined during the Seventies.

There is a temptation to lay the responsibility for the apparently sluggish rent increases at the feet of rent control. In Canada, rent control was made

universal in 1975 through the federal Anti-Inflation Programme; Smith (1982) echoes the views of many observers in charging that rent control ".....provided the ultimate discouragement for the rental housing market" (p. 18). However, the phenomenon of lagging rents has been found throughout the United States as well even though rent control has only been in existence in scattered cities;² Lowry (1981, p. 28) estimates that operating expenses rose 141% in the U.S. over the 1970-1980 decade compared with only an 87% increase in rental revenue so that net operating income increased just 34% as compared to a 113% increase in the CPI. This suggests that factors beyond rent control were at work determining rental income. Lowry (1981, p. 36) concludes that "....the great mystery of the rental market in the 1970's is why rents have increased so slowly." Interpreted as an unfathomable market failure, this triggers a call for government assistance to make investment in rental housing profitable or for government direct supply initiatives. (Johnston, 1982). Furthermore, some observers view the housing production sector as an inherently nonprogressive industry in which production costs systematically outrun obtainable market prices for the finished product (Cameron and Johnston, 1981, pp. 6-10).

(3) Housing Starts

Housing starts and completions are recorded by type of structure rather than whether they are intended for the rental or ownership submarkets. The latter classification is inherently impossible to achieve since a large number of newly constructed as well as existing housing units are capable of being offered for sale or for rent. Traditionally, housing analysts looked to apartment starts as indicative of rental production since such units were incapable of ownership and thereby automatically segmented into the rental submarket. With the substantial increase in condominium starts in recent years that assumption is no longer valid. To many analysts, however, the knowledge

that a significant portion of multiple family unit starts in recent years have been intended for the ownership market makes even more ominous the deterioration in apartment starts depicted in Table 3.

Of particular concern is the extent to which the rental production that has occurred in the past five or six years has apparently been dependent upon government assistance. Smith (1982) concludes that "....private non-government rental construction declined steadily throughout the 1970's, and by 1980/81 private rental starts had fallen to 10 percent of total starts" (p. 3).

TABLE 3
Dwelling Starts in Canada by Type of Structure
1966-82

Year	Number of Units			
	Single Detached	Semi- Detached	Row	Apartment and Other
1966	70,642	7,281	5,000	51,551
1967	72,534	9,939	7,392	74,258
1968	75,339	10,114	8,042	103,383
1969	78,404	10,373	10,721	110,917
1970	70,749	10,826	17,055	91,898
1971	98,056	13,751	15,659	106,187
1972	115,570	13,649	16,980	103,715
1973	131,552	13,235	17,291	106,451
1974	122,143	11,023	14,932	74,025
1975	123,929	15,403	21,763	70,361
1976	134,313	15,890	33,676	89,324
1977	108,403	18,373	26,621	92,327
1978	110,029	19,932	20,379	77,327
1979	109,117	16,296	13,249	58,387
1980	87,721	11,149	11,402	48,329
1981	89,071	11,768	15,525	61,609
1982	54,457	6,254	11,987	53,162

Source: CMHC, Canadian Housing Statistics, Ottawa. March, 1983. Table 9, p. 9.

Whether the dominance of government assisted starts is worthy of concern depends, in part, upon whether the starts in question were net contributions to production or simply substituted for unassisted starts that otherwise would have taken place. Smith contends that most of the ARP starts were net additions to supply because the programme was introduced in a rent control environment, and, in fact, intended to offset the negative supply impacts of rent control. (Smith, 1981, pp. 345-6). Also Cameron and Johnston are persuaded that the tax expenditure approach embodied in MURB assistance was critical to generating a level of anticipated profitability sufficient to justify investor and developer commitments.

On the other hand Gau concludes that it is unlikely that the ARP and MURB programmes were successful in generating improved rates of return to investors in rental housing and in having more than temporary impacts on supply; he suspects the benefits from these programmes were quickly capitalized into land prices. Some U.S. economists have argued that other factors of production with inelastic supply (e.g., union labor) have been successful in realizing the benefits of housing subsidy programmes so that housing supply has been little impacted (Meltzer, 1970). There is a substantial body of U.S. literature dealing with the issue of whether mortgage assistance programmes have affected either short run or long run housing supply. The focus of the debate has been upon whether credit rationing is a significant mortgage market phenomenon.³

Canadian housing agencies clearly believe that housing assistance programmes have been essential to maintenance of adequate supply incentives. A 1979 CMHC publication observed that "a continuous erosion of rental profitability precipitated by low rent increases and high carrying costs and the ending of the Assisted Home Ownership and Rental Programs (AHOP and ARP), combined to dampen multiple starts." (Canadian Housing Statistics, 1979).

(4) Affordability

Given the widely expressed concerns regarding lagging rents and sagging profits from rental housing investments, affordability is an unexpected issue. Indeed, during the decade 1971-80, Canadian per capita income rose 189 percent and family household income 157 percent while the rent index increased only 46 percent.⁴ However, the average incomes of tenant households fared less well; Smith (1982) reports that the rent to income rates for renter households increased from .18 in 1972 to .22 in 1980. Lowry (1981, p. 32) indicates a similar experience for U.S. urban households, their median rent increasing by 83% from 1970 to 1978 contrasted with median income increases of only 45%; this produced an increase in the median rent/income ratio from .21 to .25.

Some observers link this apparently weak tenant household income experience back into the lagging rental income and profitability concerns. Sternlieb and Hughes (1980) attribute the weakness in the rental market at least, in part, to the systematic 'cream skimming' of relatively affluent male headed households from the rental market as they were induced into homeownership. In this view the rental market suffers from becoming increasingly dominated by households which have not had the economic success required to elect homeownership. This phenomena is alleged to have importantly contributed to a demand weakness which holds back rent increases and consequently discourages investment in rental housing.

Operating from a similar argument Lowry has concluded (in the U.S. context) that adequate rent levels are only likely to be produced by an aggressive federal government incomes policy, viz., "Rent increases on the scale needed to cure a sick industry are likely to be achieved only by a general entitlement program of rent subsidies for low income families." (Lowry, 1983, pp. 173-4). Without such substantial demand support Lowry contends "....the rental inventory

is likely to shrink and standards of rental property maintenance to fall." (Lowry, 1983, p. 173).

Very similar contentions have been made in the Canadian context. For example, Clayton and Lampert (1982, p. 55) conclude that

"The prevailing market rents have been insufficient to allow rental entrepreneurs to cover higher financing and construction costs and still make a reasonable return on their investment in new rental projects".

They concur with Lowry that the only way rents can recover enough to provide adequate investment incentives is through a broad based program of federal government rental allowance payments to lower income households.

(5) Summary

The preceding review suggests that many housing analysts agree there exist inadequate incentives to maintain and expand the Canadian (and U.S.) rental housing stocks in the absence of significant public intervention. The critical factual assumption underlying this conclusion is that rents have failed to adjust adequately to increases in capital costs (including financing costs) and operating costs and have failed to respond adequately to disequilibrium excess demand situations (characterized by extraordinarily low vacancy rates) in a number of local housing markets in Canada and the U.S. The lack of sufficient rent increases has been attributed to some combination of rent control, ineffective demand and inherent market imperfections.

The case for CMHC or other policy intervention to deal with an impotent private market depends upon the accuracy of the assumption that lagging rents have seriously impaired developer/investor return expectations. To the extent this assumption is corroborated, the optimal form of intervention will depend upon the reason satisfactory expected returns have not been and are not being generated. In the next section we evaluate the factors proposed to explain

below normal profitability and examine the credibility of the evidence supporting the proposition that insufficient profit incentives exist to induce investment in rental housing in the absence of government demand or supply subsidies.

III LAGGING RENTS AND INADEQUATE PROFITS: A REVIEW OF THE EVIDENCE

(1) Some Possible Arguments

Unfortunately, advocates of the proposition that the mix of rising costs and lagging rents have produced below normal profits and inadequate investor return expectations do not provide a consistent explanation of the failure of rents to adjust more fully in the context of exceptionally low vacancy rates. As referenced above some observers simply regard the extended period of lagging rents as "a mystery." Others attribute this rental behavior to rent control introduced generally across Canada in 1974-75.

There are two primary difficulties with the rent control explanation. One is that the lagging rents phenomenon appears to be characteristic of housing markets across the U.S. as well, most of which were not subject to rent control. It has been argued that fear of rent control will, of itself, lead landlords to restrict rent increases to reduce the likelihood of rent control being imposed.⁵ This appears to be an analogue to oligopolistic pricing designed to restrict potential entry of competitors; it is not a credible proposition in the context of competitive urban rental housing markets occupied by large numbers of landlords. More plausible are rent increases above equilibrium in anticipation of rent control on the assumption that short run vacancies are worth enduring while waiting for rent control to work its negative impact on supply and justify the higher rents which could not be charged after imposition of rent control; in some cases, anticipatory rent increase will take

units out of the range of those brought under rent control. The second reason for skepticism with respect to primary dependence on the rent control explanation is that in many Canadian markets during the 1970's it appears that rent increases in the uncontrolled sector remained generally in line with rent increases permitted in the controlled sector.⁶

Before accepting the 'profitability crunch' hypothesis and looking further for an explanation and a cure, it is important to subject the underlying assumptions to a plausibility test. There are two key assumptions involved. First, there is an implicit assumption that the decline in vacancy rates represents a disequilibrium excess demand situation. An alternative possibility is that the 'natural' or equilibrium vacancy rate is lower in most Canadian housing markets than used to be the case.

Second, the 'profitability crunch' hypothesis accepts as obvious the proposition that declining real net operating income implies deteriorating realized earnings and diminished anticipated returns on rental housing investment. However, the conclusion does not invariably follow since realized and expected returns contain components other than net operating income. It is, therefore, necessary to address the question as to whether profitability in rental housing investment was, in fact, maintained in the 1970's despite lagging rents. Section (2) which follows reviews the factors and process by which rents are determined and examines the implications of these considerations for rental levels and their relation to profitability during the Seventies. Section (3) then considers the determinants of vacancies and the possibility that recent low vacancy levels are consistent with market equilibrium.

(2) The Determinants of Rents: Implications for Rent Behavior in the 1970's

There are a number of reasons why rents might have lagged behind operating costs and general inflation indices during all or a portion of the 1970's

without having impaired investor profitability expectations. These potential rationales flow from a variety of considerations including i) short run accidents of history, ii) special characteristic of the rental housing market which shape the inherent dynamics of price adjustment in a disequilibrium context, and iii) the determination of equilibrium rents in an inflationary environment. The last rationale contains a subplot which links to the weak demand scenario we observed above as part of the 'affordability' concern.

(a) Accidents of History

As we reported above in reviewing housing starts (Table 3) there has been a tendency to consider the level of apartment starts in recent years very low in comparison with production levels attained in the 1968-73 period. On the other hand, the number of 1968-73 starts were exceptionally high compared to preceding as well as succeeding years. Indeed, they were sufficiently high to be regarded as a prime probable cause of the higher than normal vacancy rates observed in the early seventies. (Table 1 above). This high level of apartment construction activity is usually attributed to some combination of a strong demand for such units fueled by the 'baby boom' demographics and (pre-1972) favorable tax incentives (Smith, 1982). Similarly high levels of multi-family housing starts occurred with about the same timing in the U.S.⁷ Whatever the essential causes, the result of the substantial supply additions during a six year period was an apparent disequilibrium excess supply condition in many Canadian housing markets which required some decline in real rents for markets to adjust to equilibrium. This adjustment had to occur at the same time general price inflation was accelerating (Table 2), and presumably does contribute significantly to the wide spreads between general inflation rates and nominal rent increases evident (Table 2) in the early 1970's. However, by 1975 vacancy rates were down to exceptionally low levels in most Canadian markets and it is unlikely that the inherited excess supply contributed any longer to the rent lag.

(b) The Inherent Dynamics of Rent Adjustments

In many durable goods markets, including notably the single family house market in at least some Canadian cities, asset prices appear to typically adjust to disequilibrium pressures by 'overshooting' equilibrium price. In principle, the rental price of asset services might very well behave in a similar manner and indeed, the popularity of rent control as a policy instrument must be based to a large degree upon the assumption that 'tight' rental markets do typically produce rent 'overshooting', otherwise known as 'rent gouging'. There is, however, a good deal of evidence which suggests the contrary, that is that residential property rents only adjust with a considerable lag to shifts in underlying real or nominal costs or to shifts in demand.

There are several reasons for believing rent adjustments might lag real demand and cost shifts or changes in general inflation rates. In the short run some units, of course, are leased for a stipulated period of time at fixed nominal rents and some operating expenses are contractually fixed as well; other expenses (e.g., property taxes) are only adjusted periodically. More importantly, changes in capital costs (land prices, construction costs and financing costs) frequently do not impact upon existing units for some time (e.g., at refinancing) or are embodied in unrealized capital gains (losses) which may only affect pricing decisions with a considerable lag. Since investor profit maximization depends upon pricing with due consideration to occupancy (utilization) rates as well as to marginal costs, it is not implausible that landlords would ordinarily allow utilization rates to rise before rent increases are imposed. Since tenant turnover and the risk of extended vacancies is costly, it would not be surprising if landlords waited for evidence the demand/cost shifts were not transitory before adjusting rents.

Some housing analysts (e.g., Downs, 1979) regard investors in a small number of units (which account for a sizable portion of the rental stock)⁸ as

not being profit maximizers at all. Since, for such an investor, a single vacant unit constitutes a large proportion of the total housing services the investor is offering for rent, Downs contends these investors behave as 'turnover minimizers.'⁹ This implies they are hesitant to adjust rents upward until they perceive a very high probability that no extended vacancy will result.

A related and apparently wide-spread turnover minimization phenomenon is the 'length of stay' discount.¹⁰ Where such discounts prevail, rents fully adjust only as housing units turnover tenants; this practice may have become more pronounced due to the growing pattern of legislative restrictions upon the ability of landlords to discriminate in the choice of tenants. Other things equal, landlords have a profit incentive to discriminate against tenants (e.g., children, pets, young singles) who are heavy utilizers of housing services provided or more likely to create negative externalities for other tenants.

Evidence that rent adjustment lags not only exist but are quite extended in time is provided by DeLeeuw and Ekamen (1973) in regression results based upon data from four U.S. cities during the 1950's and 1960's. Their findings indicate that rent adjustments are so sluggish that the cumulative response of rents three years after a cost or demand shift is only 60% of the full long run impact estimated in an earlier study (DeLeeuw and Ekamen, 1971). Time lags in rent adjustment appear to be particularly extended in response to shifts in capital costs. Consequently during a period in which the market faces a series of cost shocks in the same direction (1970's) it is conceivable that rents could appear to lag inflation indices and operating costs over a period as long as a decade based upon these dynamic adjustment considerations. This, of course, is even more plausible if the cost shifts occur in an environment of perceived demand weakness. Therefore, in this context lagging rents do not necessarily

imply diminished realized or anticipated profitability or reductions in investors' willingness to commit to rental housing.

Moreover, there are reasons for believing that both the existence and the magnitude of 'length of stay' or 'sitting tenant' discounts are positive functions of inflation rates. In a comparative statics model developed by Marshall (1982) in which profit maximizing landlords are assumed to set rents in nominal terms,¹¹ Marshall finds there is no difference between rents on homogeneous vacant and occupied units in a noninflationary world; however, in an inflationary world nominal rents on vacant units adjust, *ceteris paribus*, in proportion to the inflation rate but nominal rents on occupied units adjust by a factor significantly less than the inflation rate. The magnitude of the discount is positively related to the inflation rate. While the empirical evidence in support of this proposition is limited to date, this phenomenon has the potential of contributing to explaining the sluggish response of rents during the last half of the Seventies. Such an explanation serves to complement the excess supply thesis that appeared to have applicability prior to 1975.

(c) Profitability and the Determinants of Equilibrium Rents

Profitability has to be considered from the perspective of three parties. First, expected profitability motivates potential investors in rental housing. Second, existing investors are likely differentially affected by realized profits; both expected and realized returns must be adequate in comparison with alternative market opportunities. - If returns are inadequate landlords will consider alternatives such as conversion to condominium form (where permitted), conversion to nonresidential uses, undermaintenance or, in extreme situations, abandonment. Finally, the profitability of ownership in comparison with rental costs are important in affecting tenure choices of households.

In the context of the 1970's the key to understanding rents and profits in the rental housing market is understanding the impact of inflation;

unfortunately for the clarity of analysis it appears that inflation has wrought a number of non-neutral impacts upon the economics of rental housing investments. The net impact of these inflationary effects is difficult to ascertain; the nature of the effects can be identified, however.

1) potential investors

Income producing real estate is usually analyzed from the perspective of a potential investor in a present value framework. The investor's prospective before tax return on equity is a function of the capital outlay required, the stream of rents and operating expenses anticipated over the holding period, the debt/equity ratio and the cost of debt financing and the anticipated change in the market value of the property over the holding period. By establishing a required rate of return on equity (opportunity cost) the same formulation can be used to estimate an investor's or the market's demand price. Assertions that expected profitability in rental residential investments has deteriorated over time amount to claims that the real demand price for investment in a standard unit of rental housing has declined over time. By making some assumptions with respect to the impact of inflation upon the other components of return, it is possible to determine what adjustment in rental revenue is required to maintain the real demand price.

From the perspective of potential investors two components of cash flows are dramatically impacted by a step up in the inflation rate, namely i) debt service obligations and ii) market appreciation. As interest rates and debt financing at least partially reflect the higher inflation rates and financial markets price loans on the basis of inflation rates anticipated over the duration of the debt financing, debt service outlays rise more or less at the rate of increase of anticipated inflation while the net operating income stream is likely, at best, to increase at a rate equivalent to the level of inflation.

This means that the potential investor faces a substantial decrease in the prospective before tax, after debt service, cash flow.

As an offset to this negative impact the investor anticipates that the market value of the property will increase like other levered investments in real assets at least in line with the inflation rate; in part this anticipation reflects an assumption that the net operating income stream will fully adjust over time to the embedded inflation rates. Given a debt obligation fixed in nominal dollars this appreciation accrues as return to the equity investor.

For a levered tax exempt or low tax bracket investor this appreciation offset is unlikely to be adequate to maintain his demand price if interest rates adjust to the inflation rate in line with the 'Fisher Effect'.¹² For this investor rents and net operating income will have to increase at a rate in excess of the inflation rate to maintain the investor's demand price and his expected profitability.

For a high tax bracket investor, however, the tradeoff may be favorable even though rents and net operating income lag the inflation rate. The increase in interest cost is less onerous to this investor because of its tax deductibility; consequently his periodic tax obligations are reduced and after tax cash flows are impacted less than before tax cash flows. Moreover, return is shifted from a quarterly stream taxed at ordinary rates to a capital gains form which is only taxed at realization and then at the lower capital gains rate.

If this were the end of the tax impacts it is highly likely that the high tax bracket investor's demand price would increase, not decline, with inflation if rents and operating expenses expanded in line with inflation. Thus, lagging rents and net operating income would be consistent with maintenance of the demand price and thereby of expected profitability. However, the tax system tends to erode prospective profitability in an inflationary scenario in other

ways. One source of erosion is that Capital Consumption Allowances are based upon historic cost rather than replacement cost; consequently the real value of CCA deductions in excess of economic depreciation diminishes at a rapid rate over time in an inflationary environment. Second, the benefits conferred by the tax law in permitting deduction of nominal interest payments is eroded by the taxation of nominal capital gains.

Moreover, expected profitability was undoubtedly impaired in the 1970's by changes in the tax law and uncertainty regarding what the tax law would be. Canadian tax policy was structured to encourage investment in rental housing prior to 1972. Investment in rental housing benefitted from provisions permitting postponement of recaptured CCA, tax sheltering of other income and special tax treatment on death; as with other assets capital gains were not subject to tax. These benefits were removed for rental housing investments in 1972.¹³ The tax shelter provision was reintroduced in the November 1974 federal budget but only on a 'temporary' basis; the special MURB provisions were renewed annually through 1979 and reappeared for one year in 1981. However the positive impact of these provisions on expected profitability must have been significantly diluted by the uncertainty this transitory tax structure created in the minds of potential investors with regard to the longer run posture of tax provisions applicable to residential real estate.

Finally, while moderate to high bracket investors enjoyed significant declines in the real after-tax cost of borrowed funds during the periods of rising inflation rates in the 1970's, higher nominal rates imposed additional costs on investors in real estate. In addition to the direct TILT impact on debt service payments, the desire of investors to take advantage of 'cheap' after-tax real interest costs and lever more fully were met with resistance by lenders utilizing debt coverage ratio loan limits which failed to allow for the

inflation rates anticipated in the nominal interest rates being charged. This resulted in the imposition of sharply lower loan-to-value limits which forced investors into high cost junior debt financing or into dilution of equity positions. One of the more important, but infrequently recognized, costs imposed by rent control is to aggravate this situation; from the mortgagee's perspective rent control reduces the income available to cover debt service or, at a minimum, creates uncertainty regarding the ability of the rental property collateral to generate market level rents in the future.¹⁴ This reinforces the real payment TILT problem both in terms of reducing prospective cash flows and in terms of reducing the amount of mortgage credit available at first mortgage rates.

The essential conclusion to be drawn from this brief review of the return and cost components affecting the prospective investment attractiveness of rental residential property is that expected profitability is a complex amalgam of the interaction of capital costs, operating costs, financing costs, leverage and tax provisions. There are no empirical analyses which have attempted to price all of these components (What empirical evidence is available is reviewed below.) Two conclusions can be clearly stated at this point, however. First, past, present or anticipated levels of rents and net operating income are grossly inadequate means for judging realized or expected profitability. It is possible for movements in rents and net operating income to be inversely associated with profitability for reasonably extended periods of time. Second, some potential investors undoubtedly perceived diminished prospects for adequate returns from investment in rental housing during the 1970's as a result of inflation. Such investors would have included i) low bracket taxpayers or tax exempt entities and ii) investors who put a premium on cash flow 'dividends' as a source of return; investors who were heavily dependent upon mortgage financing

may have also been in this category during portions of the Seventies. On the other hand, it is conceivable that higher bracket taxpayers with less concern about the level of periodic cash flows and possessing a variety of financing alternatives found rental housing an exceptionally attractive investment. Portfolio shifts among investors produced by the various nonneutral impacts of inflation need not have caused any difficulties in attracting adequate investment to meet effective demand requirements on a market-wide basis.

ii) existing investors

Existing investors in rental housing are, of course, affected by the same factors that impact potential investors. In situations where there is a substantial difference between levels of realized returns and expected future returns, existing investors may be differentially affected by returns being realized. For investors for whom rental housing holdings constitute a significant proportion of their portfolio, realized returns directly affect their ability to maintain the quantity of housing services generated by these holdings. Moreover, to the extent rental housing is a preferred habitat for some investors, reflecting the high cost of acquiring information relevant to an analysis of local housing markets, the level of realized earnings may differentially affect the price at which such investors are willing to reinvest proceeds in rental residential property.

Investors who entered the market prior to the inflationary era of the 1970's for the most part benefitted from the operating and financial leverage provided by inflation, particularly if they were initially highly levered for a reasonably long term at a fixed nominal interest rate. The only substantial exception to this pattern occurred where the high leverage (or lower interest rates) was purchased at the cost of an income or equity participation provision which was itself highly levered as a function of the inflation rate.

Participations linked to the increase in gross income are of this type; some investors found their realized profitability severely eroded by such contractual terms. Otherwise, however, the higher inflation rates of the Seventies produced windfall transfers of wealth to real estate investors largely at the expense of mortgagees.

iii) households

Households are relevant in this scenario because their tenure choices determine the strength of demand for rental versus ownership units. In general, potential investors in owner occupied residences could anticipate the benefits of inflation noted in connection with rental housing investors but without some of the important costs. In particular, the major tax revision of 1972 left investors in principal residences in an extraordinarily favorable position. The return from this form of investment both in terms of imputed net rental income and in terms of capital gains has continued to be tax exempt. Consequently, none of the unfavorable tax impacts imposed on investors in rental housing during the 1970's in terms of i) unfavorable changes in the tax law, ii) negative effects of inflation interacting with given CCA and capital gains tax provisions or iii) uncertainty about the state of the tax rules, affected investors in owner occupied units. As will be reviewed below, the available empirical estimates suggest that demand prices (expected profitability) and realized returns on principal residences increased absolutely in real terms and relative to other major forms of investment in the 1970's. Potential investors in owner occupied housing did face similar costs to rental investors imposed by higher nominal interest rates and indeed probably had fewer hedging possibilities; these costs are not priced in empirical estimates of comparable rental prices in owner occupied and rental housing.

The significance of this apparently relative attractiveness of ownership for rental housing profitability is that it must significantly affect household

tenure choice and therefore, the aggregate demand for rental housing services. *Ceteris paribus*, a reduced demand for rental housing produced by the attractiveness of the ownership option would result in lower equilibrium real rents; consequently, from this perspective the lagging rent phenomenon is often attributed to the strong surge in ownership which characterized the 1970's.¹⁵

There is a legitimate question, however, with respect to how much of the rental market should be expected to be affected by the incentives to ownership. To the extent that the ownership choice is effectively restricted to the 'cream' of currently renting (or newly formed) households who have the assets and income required to effect the ownership decision, then it might be supposed that only the 'cream' segment of the rental market would be negatively affected. However, the demand impact would be more widespread to the extent that there are market or institutionally imposed restrictions on the ability of the rental housing units vacated (or never occupied) by the 'cream' tenure switchers to follow them into the ownership market; a potentially important obstacle in this respect are the restrictions on conversion to condominium form which have accompanied imposition of rent control throughout Canada, as well as the restrictions on demolitions or conversion to non-residential uses. Such restrictions force the excess supply in the 'cream' submarket to filter into lower priced rental housing submarkets and the filtering effect could spread the loss of demand from the 'cream' households through a substantial portion of the rental market.

(d) Empirical Corroboration -

There exists very little in the way of empirical literature that tests the proposition that real realized after tax returns on equity from rental housing investments were at least maintained during the 1970's at levels consistent with earlier periods and at levels competitive with returns realized on alternative risky investments over similar holding periods. As is clear from the discussion above the data requirements to carry out such estimations are very demanding.

However, there seems to be a widespread view in the real estate investment literature that contrary to the chronic profitability 'crunch' thesis, the Seventies represented a golden era of returns to equity investors in real estate, and investments in rental residential property are not excepted from such generalizations.¹⁶ Gau (1983), working from a sample of 140 apartment and 71 commercial properties in Vancouver that sold in 1979 was able to construct annual operating statements and debt service obligations from 1971 to 1979. By assuming investors were in the 50 percent marginal tax bracket and thereby able to fully shelter income to the extent permitted under the operative tax laws, Gau is able to compute realized after-tax returns for complete holding periods. He concludes that investors in the apartments realized mean after-tax returns on equity of 24.4% while investors in the commercial properties realized 19.7%. These are very impressive returns in comparison with other assets; they represent large positive real after-tax returns in an environment in which nearly all financial assets (common stocks and a wide variety of debt obligations) realized negative real after-tax returns. Moreover, not only do Gau's results for apartments show a higher mean return than for rental properties but significantly smaller proportions of apartment investors realized low positive returns (less than six percent after taxes) or negative after-tax returns than was true for the commercial property investors (Gau, 1983, p. 23).

As might be expected from our earlier discussion these impressive returns are heavily dependent upon two factors: i) financial leverage (the mean after-tax return on apartments wholly financed by equity was only 10.3 percent (Gau, 1983, p. 20) and ii) market price appreciation (for many apartments the reversion cash flow was the only positive contributor to net present value). Since the unusually large impact of financial leverage reflected, in part, windfall wealth transfers from mortgagees to equity investors and since this

phenomenon also partly accounts for the market values realized, returns realized may not be reliable indicators of anticipated future returns.¹⁷ Most published systematic estimates of expected returns are unfortunately based upon U.S. data and after-tax return expectations, in particular, have to be treated cautiously in terms of application to the Canadian context because of differences in the tax approaches and the nature of modifications made in the tax laws in the two countries during the Seventies. However, since similar concerns have been expressed regarding the 1970's profitability 'crunch' in rental housing in both countries, the broad conclusions available from U.S. studies seem relevant.

DeLeeuw and Ozanne use the present value framework to estimate demand prices for 'representative' new rental housing investments in the context of the mid-1960's and again for the mid-1970's. Their present value comparisons are all for optimal holding periods (those that maximize present values) and are based on high tax bracket investors able to make use of income tax sheltering provisions incorporated in the U.S. tax law. They find no trend in profitability (demand prices) between the two points a decade apart although there is shift in the form of return from the periodic income stream to expected capital gains. The favorable impact of financial leverage in the 1970's is just about offset by the erosion of return produced by the interaction between inflation and the tax provisions governing depreciation deductions and taxation of capital gains. As is true of other studies, the potential negative impact of inflation interacting with inflexible fixed nominal interest rate mortgage instruments and rigid loan underwriting guidelines is not priced in their calculations.

Some housing analysts have employed a slightly different approach by computing a user cost of capital for rental housing.¹⁸ User costs convert all capital and operating costs to an annual basis. So long as the same components

are utilized the user cost approach can be conceived as equivalent to the present value approach; in fact, the rent at which net present value is zero can be interpreted as equivalent to the user cost. Thus, the trend in profitability over time can be depicted by comparing observed rent levels to the estimated user cost for rental housing. Hendershott (1980) has compared his user cost of capital estimates for rental housing with the U.S. CPI rental index over 1956-80; no trend is evident and profitability in the latter half of the Seventies is comparable to that observed in the early Sixties. Again, lower real mortgage rates in the Seventies together with relatively high market value appreciation expectations offset lagging net operating income, higher nominal debt service payments and increasing tax obligations.

Many computations of user costs of capital are made for the purpose of comparing the attractiveness of homeownership relative to renting.¹⁹ These results consistently indicate that the real user cost of ownership fell through the Seventies, and even become negative for higher bracket taxpayers; consequently, although realized and prospective profitability of rental housing was well maintained in relation to alternative categories of investment in the 1970's, it suffered in comparison with returns realized and expected on owner-occupied housing. Both DeLeeuw and Ozanne (1979) using the present value/demand price model and Hendershott (1980) and others²⁰ computing a real user cost of capital for owner-occupied housing, conclude that expected returns from owner-occupied housing were extraordinarily high in comparison with alternative risky investments, including rental housing, for households in moderate-to-high tax brackets. These calculations depend, of course, importantly upon the computations of expectations of future inflation rates applicable to house prices; generally analysts assume households operate within an adaptive expectations framework and form their expectations on the basis of a

distributed lag of past prices of the component in question. The consensus result that owner-occupied housing was much cheaper than renting for moderate-to-high bracket taxpayers is driven by expectations of declines in both real after-tax mortgage rates and the real after-tax cost of 'own' equity and by expected house price inflation that exceeds expectations for the general inflation rate. As we have seen above these positive impacts on investment return are not diluted for the owner occupier by profit erosion from realized inflation interacting with the tax laws.

Similar results have been obtained in the Canadian context by McFadyen and Hobart (1978) for the first half of the Seventies and by Capozza (1983) for 1972-79. Their calculations confirm that owner occupied housing was indeed purchasable at bargain rates for many Canadian households. Capozza (1983) computes a variation on the user cost approach which indicates that this was the case during the 1972-79 period for Canadian households in medium-to-high tax brackets. Because he assumes that the opportunity cost of equity funds is less than the mortgage rate this result is most striking for all cash, high tax bracket buyers.²¹

The impact of all of the user cost computations in the literature is so powerful for the 1970's is that it overrides the trend toward declining real rents and provides strong incentives for more households to make the ownership choice. The proportion of Canadian households who own their dwelling unit increased from 60.3% in 1971 to 61.8% in 1976 and 62.1% in 1981. (Statistics Canada, 1983). This is a remarkable occurrence in the context of the demographic pressures at work in the Seventies in combination with socioeconomic forces affecting life style choices. As is well known the demographic history of the 1970's was characterized by the coming of household formation age of the 'baby boom' generation of the Fifties. As a result of a variety of

socio-economic factors the decade was also characterized by disproportionate growth in non-traditional households including, in particular, a marked growth in single person households and single adult, female headed households with dependent children. The growth in single person households includes a substantial component of elderly persons. By traditional family standards, this rapid increase in headship rates (Brown, 1983) represents a fragmentation of households;²² such fragmentation should be expected to leave many non-family households with limited economic resources. The combinations of growth being focused upon young households, single female parent households and single person households, should have resulted in a reversal of the trend to home ownership during the 1970's and the Seventies should have become known as the rental decade. ²³ Only something quite powerful could have intervened to prevent this tenure choice scenario from being realized;²⁴ the only factor which has been suggested which is credibly powerful enough to explain the continuing preference for ownership is represented by the declining relative price of the ownership option depicted by the user cost calculations, which, as we have seen, are heavily dependent upon high expected capital gains and a low expected after-tax real cost of debt and equity funds.²⁵

However, it should be noted that not all economists find explanations based upon the typical user cost calculations to be plausible. Diamond (1981), who is one of the important contributors to the real after tax user cost of capital approach, (Diamond, 1980), has expressed skepticism that the user cost estimate can be relied on to explain tenure choices in the 1970's. These doubts are based, in part, on concern about factors left out of the computations (including the nominal interest rate, loan underwriting issues), in part, on the small number of data points relative to the large number of factors impinging upon tenure choice and, in part, upon the complex forecasting procedures the approach

assumes households were effectively utilizing well before they were recognized by economists. The implications that household tenure choice decisions during the 1970's reflected a full adjustment for expected inflation is especially difficult to accept for economists (e.g., Modigliani and Cohn, 1979) who base explanations of price behavior in equity and debt securities markets upon the hypothesis that financial markets were engulfed by inflation illusion. For these economists acceptance of the real after tax user cost thesis as an explanation of tenure choices and house prices requires believing that households are much more sophisticated economic entities than investors in stock and bond markets.²⁶

(e) Rent Behavior Since 1979

In this section we have presented a number of rationales in support of the hypothesis that lagging rents and net operating income could be consistent with profit maximizing investors operating in a rental housing market in equilibrium. The conditions that make this result plausible arise from the non-neutral impacts of the inflationary environment of the 1970's. Macroeconomic conditions and investor expectations have been dramatically altered since 1979; the apparent abrupt change in expectations is frequently attributed to the U.S. Federal Reserve Board's announcement in October, 1979, that U.S. monetary policy was going to concentrate henceforth upon limiting money supply growth regardless of what that might mean for interest rate movements.²⁷ In any case there has occurred a marked reversal in perceptions of the critical economic variables; expectations of deflation replaced the inflationary expectations of the Seventies and after-tax real interest rates were perceived as increasing to relatively high levels.

In this environment, reversing the argument that justified lagging rents and net operating income these components should now be expected to increase at rates well in excess of the inflation rate in order to offset expectations of

declining contributions to profitability from capital gains and the real after tax cost of capital. There is little evidence of this occurring in the broad indices displayed in Table 2; not until 1982 is there even a perceptible narrowing of the spread between the rate of increase of the overall CPI and of the rental component. However, since as indicated earlier, both series are flawed, this spread does not represent a reliable or sensitive indicator. Evidence from local housing markets suggests rents were quite responsive; for example, during the 1974-1979 period in Greater Vancouver rents in units exempt from rent control increased about in line with rent increases on controlled units, but during 1980-82, even though controlled units were allowed and did obtain substantially larger rent increases than previously, increases on exempt units were much larger.²⁸

The Institute of Real Estate Management reporting on data from its annual survey of apartment buildings in U.S. and Canadian cities, concluded that 1981 brought a "Significantly improved operating picture -- as rental gains finally caught up with operating expense hikes, and generally kept pace with national consumer price inflation" (IREM, 1982, p. 12). Actually results reported for most cities indicate that increases in net operating income exceeded the inflation rate. As Table 4 indicates, substantial improvement on the rental receipts to operating expenses relationship had occurred in most types of apartment structures in Canada by 1981. The longer run perspective provided in Table 5 suggests that by 1980 operating expenses were at or close to 25 year lows in relationship to rent collections. Consequently, although the evidence is sparse, what is known does not corroborate the thesis that market imperfections restrain rents from responding when needed to provide adequate profitability incentives to investors. The sharper increases in rents in 1979 have, however, revived concerns about affordability in a social equity context

even while anxiety about the depressing impact of affordability problems on effective demand were being alleviated.

TABLES 4 AND 5 ABOUT HERE

One implication of this description of the market pressures on the rate of change of rents is that generally rent control had comparatively little impact upon rent levels during the 1970's, but constituted a serious constraint since 1979. Rent control may have had substantial negative impacts on supply during the Seventies, however, through creating uncertainty with regard to attainable future levels of rents.²⁹ However, some economists have estimated that rents in the late Seventies were severely impacted by rent control.³⁰ In any case, the one part of the rental market puzzle which remains unexplained is the common phenomenon of persistently very low vacancy rates.

IV THE DETERMINANTS OF VACANCIES: ALTERNATIVE EXPLANATIONS OF LOW VACANCY RATES

As we have seen, those who judge the rental housing market to be in a state of ill health, point to two periods of prolonged low vacancy rates across many Canadian cities. The presumption is that low vacancy rates represent a disequilibrium situation which the market price system has failed to correct in a timely fashion via rent increases which would stimulate adequate supply responses. We have shown in Section 2 that the thesis that rents severely lagged demand and cost pressures during the 1970's is open to question if lagging rents are identified with inadequate investor return expectations. Recent analyses of the relationship of the rate of change of rents to vacancy rates indicate that when the relationship is properly specified to include such

TABLE 4

Annual Operating Ratio
 (All Expenses Divided by Total Actual Collections)
 For Unfurnished Apartments in Canadian Cities
 By Type of Apartment Structure
 1977-1981

Year	Elevator	Low Rise		Garden
		12-24 Units	25 or More Units	
1977	52.6%	56.3%	54.4%	45.7%
1978	48.6	55.1	48.6	44.5
1979	48.3	56.7	50.2	40.1
1980	50.4	47.4	47.5	39.8
1981	47.6	56.9	50.2	36.8

Source: Institute of Real Estate Management of the National Association of Realtors, Income/Expense Analysis: Apartments, 1982.

TABLE 5
Annual Operating Ratio for Apartments in
U.S. and Canada By Building Type
1955-1980

Year	Elevator	Low Rise		Garden
		12-24 Units	25+ Units	
1955	55.8	54.2	52.8	50.8
1956	59.5	56.4	52.8	40.9
1957	62.7	53.5	51.7	46.0
1958	61.1	50.7	52.0	47.1
1959	57.8	52.8	55.9	41.3
1960	52.7	51.9	54.2	45.1
1961	50.0	49.5	52.8	44.6
1962	54.1	53.9	58.2	46.3
1963	48.3	54.9	52.9	45.9
1964	48.3	53.5	56.4	48.6
1965	49.9	55.8	55.2	48.3
1966	49.9	54.7	55.2	47.8
1967	49.7	55.3	56.6	47.8
1968	49.8	56.3	56.8	47.9
1969	49.7	56.0	55.3	47.6
1970	51.0	57.4	50.3	47.8
1971	51.0	54.3	53.2	49.8
1972	51.7	52.6	49.6	49.3
1973	53.3	52.2	49.6	49.1
1974	55.0	50.9	50.6	51.1
1975	56.0	51.2	53.3	52.0
1976	55.8	51.8	52.2	52.4
1977	53.7	50.2	50.3	48.8
1978	52.2	47.4	48.2	46.2
1979	52.1	48.0	46.6	45.6
1980	52.5	47.8	48.2	44.5

Note: Annual Operating Ratio is All Expenses divided by Total Actual Collections.

Source: Same as Table 4.

factors as the observed vacancy rate in relationship to the 'natural' rate and the rate of change of rents in relation to inflationary expectations,³¹ that rents do appear to be responsive to vacancies, contrary to several earlier studies.

There are two basic types of reasons why the low vacancy rates of the mid-Seventies and late Seventies-Early Eighties may not represent an excess demand disequilibrium situation. First our review of the determinants of rents indicated that price (rent) adjustments are jointly managed with the level of inventory and that there were several reasons why the inherent dynamics of rent adjustment would proceed by allowing a vacancy adjustment to occur first. To the extent this is correct, then any period during which there are several sequential demand/supply shifts which put upward pressure in rents, the price adjustment dynamic initially puts downward pressure on vacancies; with a repeated series of such shocks the resulting depressing impact on vacancies might continue for some time. Second, vacancy rates which persist at levels below what had been previously regarded as 'normal' may reflect a downward adjustment in the long run equilibrium or 'natural' vacancy rates.

The notion that long run profit maximization may be consistent with short run 'turnover minimization' finds some empirical support in a recent study on U.S. data (Philadelphia) by Marshall and Guasch (1982). Downs (1979) 'turnover minimization' thesis was supposed to apply in particular to rental buildings with a small number of units; Marshall and Guasch (1982) report that structures with less than five units do have systematically lower vacancy rates largely because they have a significantly lower frequency of vacant units (there is less difference among structure types in the duration of vacancies). In an era (1970's) where there is continual upward pressure on (nominal) rents the landlord risk aversion characteristic reflected in turnover minimization may put continued downward pressure on vacancies.

Rosen and Smith (1982) have found large variations in the 'natural' or long run equilibrium vacancy rate across U.S. cities. The variable which contributes most to empirically explaining these differences in equilibrium vacancies is tenant turnover rates; there exists a positive relationship between turnover rates and the 'natural' vacancy rate. Turnover rates depend on growth rates of population and numbers of households in a housing market as well as mobility of existing households. In our review of rent determination we discovered several phenomena characteristic of the past decade which might be expected to affect market perceptions and anticipations regarding tenant turnover rates. In particular, we observed that inflation and inflationary expectations had potentially dampening impacts upon vacancy rates both through reducing mobility via larger rent discounts for 'sitting tenants' and through reducing demand via inducements for households to shift to the ownership option. In addition, by the late 1970's it is plausible that the willingness of investors to supply new units in response to low vacancy rates was diminished by forecasts of low increments to rental housing demand after 1985 based upon i) the demographics of the post 'baby boom' or 'baby bust' generation producing a sharp fall off in net household formation and ii) the aging of the 'baby boom' generation into cohorts which normally are disproportionately into home ownership.³² All of these factors might reasonably be expected to contribute to a reduction in the 'natural' vacancy rate below the three percent range historically regarded as 'normal' in the CMHC series.

However, while these determinants of the 'natural' vacancy rate could plausibly account for a significant reduction in the equilibrium vacancy rate, it is not plausible that they explain the rates below 0.5% that have persisted for extended periods in a number of Canadian markets. These experiences must either reflect market failure or the existence of some externally imposed

constraint on market response that is peculiar to the period since 1973. The most likely candidate in the external constraint category is certainly rent control although in certain jurisdictions other governmentally introduced factors, e.g., changes in Landlord and Tenant Acts or in land use controls may have contributed. Governments recognize that rent control has negative supply effects; this is acknowledged by governments when they accompany or follow rent control legislation with restrictions on conversions of rental units to condominiums or other uses and restrictions on demolitions of rental residential properties. These sorts of restrictions only provide short run delaying effects on supply reduction, however. It is therefore credible to believe that the impact of rent control in the 1970's is reflected more in vacancy rates than in the rate of increase of rents.

V. RENTAL HOUSING: VICTIM OF MARKET FAILURE OR GOVERNMENT INTERVENTION?

Our analysis to this point indicates that the primary sources of evidence in support of the thesis that the market system has failed to efficiently meet effective demand for rental housing services during the past decade are i) the tendency for rents to lag increases in operating, financing and capital costs as well as the increase in the general price level and ii) the fact that many Canadian cities have endured extended periods of historically extraordinary low rental housing vacancy rates. We have examined the assumption that lagging rents and low vacancy rates can be accepted as evidence of market failure and have found this relationship to be tenuous at best.

The reason lagging rents can be consistent with efficient markets in equilibrium is primarily due to the non-neutral impacts of inflation upon the demand for and supply of rental housing services. If these schedules are specified in terms of the real flow of services as a function of nominal prices (rents), then if inflation were neutral, *ceteris paribus*, both demand and supply schedules would shift by the change in the inflation rate, nominal rents would increase in line with the inflation rate once the new equilibrium is established and real rents would remain unchanged. The equilibrium flow of real housing services would also remain unchanged as a result of the full adjustments of demand and supply.

However, there are good reasons for believing that inflationary expectations, operating through the tax system, induced household tenure switches from rental to ownership and systematically retarded the shift in the demand schedule based on nominal rents. As we have seen, there are many conflicting non-neutral impacts of inflation at work on the supply schedule, and although the net result is uncertain, it is reasonable to believe that the

supply schedule also shifted by less than the change in the general price level. The result of these partial adjustments is rents increasing by less than the inflation rate and, if operating expenses move at least in line with the inflation rate, real net operating income declines as real rents fall. The effect of these incomplete adjustments to inflation on the equilibrium flow of real housing services depends upon the relative magnitude of the supply and demand shifts.

To the extent this scenario underlying these partial adjustments accurately characterizes the inflationary era of the 1970's, then declining real rents and net operating income are compatible with a market efficiently adjusting to equilibrium and do not constitute evidence of a chronic excess demand disequilibrium status. We have also found that there is evidence rents have responded since 1979 to altered expectations where they have been allowed to adjust to market equilibrium levels and we have seen that some of the factors accounting for sluggish nominal rent responses in the Seventies are also likely to have affected a reduction in the long run equilibrium ('natural') vacancy rate. However, it is not plausible that the very low vacancy rates observed in numerous cities for extended periods can be consistent with equilibrium. If these phenomena do not reflect market failure in the rental housing market they must be produced by externally imposed constraints originating in related markets or from government interventions.

Our review has indicated that the most likely case of market failure impinging upon rental housing is to be found in the mortgage financing market. Lenders in this market, battered by unanticipated inflation, appeared to be quite slow to adapt the design of mortgage instruments (especially repayment features) and loan underwriting guidelines to an inflationary world. Intermediary financial instruments and markets that would provide mortgagors

with a mechanism for hedging the interest rate and payments risks inherent in traditional mortgage instruments have also been slow to develop. Consequently, investors in residential properties were forced into costly expedients including various forms of vendor financing, junior debt financing and equity financing as substitutes for first mortgage funds.

Several forms of government intervention have adversely impacted rental housing market adjustments in the period under consideration. The two areas of government activity which are likely to be quantitatively important and possess the timing required to have impacted upon investor returns and rental housing inventories in the Seventies are i) taxes and ii) rent control. The tax impacts occurred in three forms. First, the major changes in the 1972 federal tax legislation markedly affected expected returns on investment in rental residential property in a negative fashion while leaving the tax expenditure subsidies afforded investors in owner occupied residences unaffected. Second, failure to adapt CCA rules and the taxation of capital gains to inflation resulted in an increased real tax burden on investors in rental residential property which eroded after-tax returns on equity, the degree of erosion being a function of inflation rates. Third, the on-again/off-again posture of the federal government with regard to the eligibility of 'MURBS' for special tax shelter status diluted any positive impacts on anticipated returns and added to the unusually high degree of uncertainty faced by investors.

It is not clear that rent controls had a significant effect upon rent levels during the Seventies; there is a wide variety of opinion and evidence in this regard. It is clear, however, that rent control must have markedly affected investor expectations with respect to their ability to realize market level rents in the future and consequently reduced anticipated returns from investment in rental housing. Rent control also interacted with mortgagee debt

coverage ratio guidelines to further limit the amount of mortgage financing available to rental property investors at first mortgage rates. The changed economic environment of the early 1980's featuring deflationary conditions and high after-tax real interest rates required substantial rent increases to meet potential investor and existing landlord supply price requirements; the continuing applicability of rent control to a substantial segment of rental properties inhibited this market rent response in many Canadian housing markets. Finally, the restrictions upon conversions and demolitions imposed to prevent units from escaping rent control contributed further to the reduced expectations of return from investment in rental housing.

The inducements toward home ownership provided by the tax system, reinforced by an inflationary environment were further accentuated during the past decade by a series of government programmes subsidizing ownership. These included, in particular, the AHOP and related cooperative housing programmes and RHOSP endeavours as well as numerous federal and provincial grant, mortgage subsidy and mortgage renewal subsidy programmes. All of these efforts add to the tax system's bias toward reducing the demand for rental housing.

Some assistance has been available to the rental segment of the housing market as well. These include ARP, designed as a companion to AHOP, and public housing and successor nonprofit and cooperative rental housing programmes, and recently, the Canada Rental Supply Plan, in addition to the tax sheltering of MURBS. All programmes focussed on producing rental supply for lower income households contain serious internal equity problems since only a small portion of the eligible households are benefitted. The 'massive inequity' inherent in the federal-provincial public housing programme combined with the 'staggering costs' led to it being dramatically scaled down and largely replaced by the

differential interest non-profit and cooperative programmes during 1978. (Matthews Report, 1979, p. 10 and p. 56). The internal equity problems in the latter approach are apparently exacerbated by the large number of units occupied by tenants able to pay market rents. For example, CMHC approaches differential interest assistance to cooperative projects on the basis that they must be able to break even without further assistance. Thus, only 15 percent of the units are reserved for low income tenants whose rents are based on the federal rent-to-income scale (Matthews Report, 1979, p. 60); this guideline is apparently considered deficient by many local governments who view housing for low income and low wealth households as the principal housing problem.³³

Assistance policies of the ARP (and AHOP) form run the particular risk of inducing supply of the wrong form in the wrong location; such units are vulnerable to market price declines, subject to undermaintenance, deterioration and even abandonment and consequently are much more exposed to mortgage delinquency and foreclosure risk. These risks are reflected in the extraordinarily high loan delinquency rates experienced by ARP (AHOP) loans; less severe, but also quite high delinquency rates have also been reported for non-profit and cooperative ventures involving CMHC financing.³⁴

The ability of governments to effectively utilize forms of direct supply inducements (ARP, MURBS, COOPS, etc.) or demand inducements (e.g., rent supplements) designed to stimulate supply indirectly depends upon the economic and regulatory environment in which these economies are provided. A critical element in this environment are the variety of land use controls utilized by governments. Since these are largely local in legislative design and administrative implementation it is beyond the scope of this paper to evaluate whether the trends in application of such tools have exacerbated rental housing market difficulties in the past decade and whether they bear some responsibility

for the periods of enduring low vacancy rates and the housing difficulties encountered by special problem groups such as the handicapped, elderly needing nursing or other service assistance and single adult female-headed low income families. However, the tendency of land use controls to operate in an exclusionary, supply restricting manner significantly increasing the price of housing services has been well documented.³⁵ They induce developers and builders to concentrate on the higher priced segment of the housing market (Frieden, 1979) and create barriers to entry which accentuate any market structure imperfections which may exist in local housing product market (Dowall, 1979). Building codes have tended to lose contact with original public health and safety objectives (Babcock and Bosselman, 1973) and code administration combined with zoning variance approvals have produced extended delays which become particularly costly in periods of high real interest rates; it is approval delays which were most frequently cited by major Canadian developers as they shifted the focus of their housing activities outside Canada during the Seventies.

Several studies have concluded that density restrictions have had particularly large impacts upon the price of residential land and thereby upon the supply price of new housing.³⁶ Such restrictions particularly affect rental housing since the bulk of multifamily projects are still in the rental sector. Since sharp upward movements in the supply price of new production is nearly always dominated by increases in the price of land, and land prices in a number of Canadian cities appear to be particularly sensitive to shifts in final demand, evaluation of density restrictions is especially important to assessment of the prospective net impact of government housing programmes upon housing supply. To the extent that the Gau and Wicks (1982) conclusion that the ARP and MURB subsidies were largely dissipated in land price increases, rather than

inducing net supply additions, in the Vancouver market is generalizable to other Canadian cities the ability of such programmes to generate rental housing is severely impaired.

Before drawing the policy implications and recommendations for the Eighties that flow from these considerations, we briefly consider in Section II whether there exist important rationales for housing policy beyond compensating for market failures that should guide policy formation during the remainder of this decade and in Section VI the special characteristics of the latter half of the 1980's which should affect policy formulation.

VI. ALTERNATIVE RATIONALES FOR GOVERNMENT INTERVENTION IN THE RENTAL HOUSING MARKET

In this paper we have focussed upon the proposition that rental housing in Canada is a victim of market failure resulting in a system where rents fail to respond to excess demand, as represented by low vacancy rates, thereby producing inadequate incentives for investors to maintain the existing rental stock or to add to that stock. Over time government intervention in the housing market has been justified in other ways, however. Some have contended that market imperfections requiring offsetting policy initiatives take other forms. For example, as we have seen, it has been asserted that the housing production industry is inherently non-progressive so that, even if it responds quickly to correct disequilibrium situations, it is subject to trend increases in the real supply price of housing creating increasingly widespread 'affordability' problems. Others have argued that the critical market failures affecting housing have occurred in the financing industries.

In markets characterized by significant benefits or costs which are not internalized into the functions affecting individual demand and supply

decisions, the market price and rate of production will not be at socially optimal levels unless mechanisms to force internalization, or to compensate for the externalities, can be implemented. Historically it has commonly been argued that housing is particularly subject to positive externalities which will result in undersupply of housing services in the absence of sizable governmental initiatives. The presumed existence of such positive externalities also underlies much of the rationale for structuring income redistribution policies in the form of 'in kind' transfers of merit goods (e.g., medical services, education and housing) rather than unrestricted transfers of income or wealth.

Finally, historically some major components of housing policy have been directed toward reduction of the amplitude of the residential construction cycle. The rationale for a cyclical stabilization policy is usually based on the presumption that cyclical production volatility imposes costs on the housing industry which generate long run misallocations of resources. It is beyond the scope of this paper to analyze in detail each of these arguments for public policy initiatives; we can, however, briefly indicate the reasons we believe these objectives do not constitute credible rationales for broad based intervention in the rental housing market during the last half of the Eighties.

1) Nonprogressivity, Externalities, Affordability and Redistribution

Non-progressive industries are viewed as those with little or no history of productivity gains over time usually because there is little possibility of deviating from fixed proportions of factor of production inputs in response to changing relative prices of those inputs; due to the inherent nature of the product or service produced or to technological or institutional barriers to innovation, or the adoption of innovative production methods, the output of such industries is subject to increasing real costs over time. The usual examples of industries of this type involve labor intensive production of services as in the

performing arts and to an extent, education and medical services (Baumol and Bowen: 1966). However, housing production has also frequently been cited as an industry with non-progressive characteristics. Sometimes this character is attributed to market structure; e.g., monopoly power possessed by certain labor or materials supplies or the large number of small, undercapitalized producers in the industry who are viewed as incapable of the research and development effort required to introduce new materials and techniques of production.

It is difficult to attach much credibility to this contention as a cause of rental housing problems over the past decade. The increases in residential building materials and wage rates over this period have been, if anything, less than the overall CPI increase.³⁷ During the Seventies, as we have seen, real rents declined and the real cost of homeownership declined even more sharply. Higher costs borne by some households derived more from increases in real (early 80's) and nominal (Seventies) financing costs and occasional sharp increases in land prices than from the traditionally cited labor and material input prices.³⁸

To the extent there do exist barriers to introduction of less expensive materials, this most likely primarily reflects government imposition of restraints through the National Building Code and related restrictions; while a National Building Code serves to reduce competition among provinces and local government to reduce or control growth through code restrictions, it fails to recognize that optimal inputs into housing production are likely to vary greatly across differing climatic and environmental conditions. With respect to high land costs, it is clear that there are many methods of economizing on land; the primary obstacle to doing so are land use restrictions which deny economically viable residential property densities and frustrate market demands. Consequently, rather than representing a need for additional government intervention this more likely represents an area where the public policy challenge is to reduce and liberalize existing governmental interventions.

The contention that housing produces positive externalities is usually presented in two forms: (1) a tendency to undermaintain existing housing since improvements produce benefits which are partly captured by neighbors and cannot be internalized and (2) the proposition that improving the quality of the housing stock produces important social benefits ranging from crime reduction to enhancement of childrens' motivation to the development of neighborly, caring qualities among households. Although evidence supporting the latter contention is scarce, in a world where a significant part of the housing stock is below minimum adequacy or subject to crowded living conditions by conventional standards, it is not unreasonable to base policy on the likelihood that substantial positive externalities would be generated by improved housing conditions. But crowding has been virtually eliminated as a problem and inadequacy is essentially limited to small segments of the population with special problems. As of 1978 only 3.5 percent of occupied dwellings in Canada contained more than one person per room, down from 16.5 percent in 1961 (CMHC, 1981: 13) and in 1981 only 1.6 percent of families did not maintain their own household versus 6.0 percent twenty years earlier and 12.7 percent in 1951.³⁹ Less than five percent of Canadian households had housing adequacy problems as of 1979; however, the bulk of these were in the rental sector where 11 percent of households lived in inadequate units. (Fallis, 1983, 295-6). In these circumstances, it is highly doubtful that prospects of social benefits from positive externalities can justify a broad-based program to stimulate investment in rental housing during the latter half of the 1980's.

Among the alleged symptoms of ill health characterizing the rental housing market which were cited at the beginning of this paper was the reported increase in the rent-to-income ratio for tenants during the 1970's from .18 to .22 (Smith: 1983:1). This has to be interpreted in the context of the inducements to

ownership which existed in the Seventies and produced 'cream skimming' of higher income rental households. Consequently, the gross rent-to-income ratio figures do not mean that households who remained tenants during the Seventies as a group endured rent increases in excess of their income gains; indeed, it is unlikely that this occurred.⁴⁰ Thus, the experience of the Seventies does not provide justification for utilizing the rental housing sector as a focus for an income redistribution program. Some carefully limited redistribution programs through rent supplements may be justified in the context of the more pronounced rent increases we have seen occurring (and required to maintain investment incentives) in the early Eighties.

The case for keeping any such programmatic activity limited to select groups with special housing service needs is quite strong. Particularly persuasive is the trend in estimates of the income elasticity of the demand for housing services for renters in comparison to homeowners and low income households versus other households. Most low income/low wealth Canadian households are renters.⁴¹ Income elasticities of demand for housing services for low income and renter households are very low and have declined significantly over the past twenty years; most estimates for these groups in recent years are less than 0.5 and some are in the 0.1 to 0.3 range.⁴² These results suggest that low income renter households do not regard themselves as housing poor so much as they perceive themselves as deficient in consumption of non-housing goods and services. Code and zoning restrictions undoubtedly have the effect of forcing lower income households to expend more of their limited budgets on housing services than they would choose voluntarily. These elasticity estimates together with the evidence on the adequacy of housing occupied by the great bulk of Canadian households also casts doubt upon the general validity of the paternalistic contention that in-kind housing allowances or rent supplements are

a necessary form of income assistance in order to ensure that all members of an assisted household are benefitted. In-kind or direct supply assistance should be limited to cases of low income/low wealth households, where special needs not served by the market are involved and assistance is unlikely to distort income/leisure decisions.

2) Cyclical Stabilization

Whether or not cyclical instability imposes significant long run costs upon the housing industry remains an unresolved issue. Historically, the counter-cyclical character of the residential construction cycle posed a policy tradeoff between overall economic stabilization and housing production stabilization in any case. Most explanations of the residential construction cycle focus upon volatility in real and nominal rates of interest. The key issues involve the elasticity of demand for investment in housing with respect to real interest rates and nominal interest rates and the elasticity of the supply of mortgage funds with respect to the same variables.

To the extent disintermediation and credit rationing occur or inflexible mortgage instruments create liquidity obstacles, then institutional market failures may be deemed to be present. The rollover mortgage appeared to contribute significantly to alleviating the vulnerability of institutional suppliers of mortgage funds to interest rate fluctuations. Despite the volatility of the 1970's the Canadian housing cycle in the Seventies was of substantially smaller amplitude than in the Fifties and Sixties; it was also much less volatile than the U.S. housing cycle of the Seventies.⁴³ Since 1979, however, volatility has increased dramatically indicating the unmodified rollover loan is inadequate in the unstable post 1979 environment. In dealing with financing imperfections, CMHC undoubtedly has an important role in

educating mortgage lenders and residential property investors in ways available to hedge interest rate and cash flow risks through instrument design and market positions in options and futures markets. This may require offering hedging opportunities in the form of mortgage rate insurance to the many rental property investors who, like owner occupier households, are not in a position to adopt hedging positions directly.

VII. POLICY FORMULATION IN THE CONTEXT OF THE 1983-90 ENVIRONMENT

The conclusion of this paper is that the case for any generalized program to stimulate production of rental housing is weak, contrary to the prescriptions of many housing policy analysts and market participants. Since no observer's conclusions should be stated or accepted as certain, it is important to weigh the risks associated with any proposed policy action or inaction. From the perspective of what can be visualized about Canadian housing demand in the late Eighties and Nineties, the risks associated with rental housing stimulus programs in the mid-Eighties seem very high. The reason for this high risk exposure is the visible demographic facts which will dominate the remainder of this century.

The central demographic facts, of course, are the aging of the Baby Boom generation and the coming of age of the Baby Bust generation. These impact both the rate of net household formation and tenure choices. It has been projected that the annual growth rate of the stock of Canadian households which averaged 3.4% during 1971-76 will only average 2.4% during 1981-86, 1.9% in 1986-91, 1.25% in 1991-96 and but .9% during 1996-2001. (Brown: 1983: p. 14). As the Baby Boom generation leaves the 15-24 age cohort which has a 19% ownership rate and the 25-34 age cohort with a 52% ownership rate it enters the middle aged categories where 71 to 75% of households are owner-occupiers.⁴⁴ The result is

a sharp decline in net housing units demanded but an even sharper decline in the net demand for rental units as illustrated in Table 6. Thus,

TABLE 6
Average Annual Housing Requirements by Tenure
Canada 1976 - 2001
(thousands of units)

	1976-81		1981-86		1986-91		1991-96		1996-2001	
	#	%	#	%	#	%	#	%	#	%
Homeownership	118.5	53	123.6	59	117.4	65	93.9	71	72.6	74
Rental	104.0	47	86.6	41	64.0	35	37.7	29	26.0	26
Total	222.5	100	210.2	100	181.4	100	131.6	100	98.6	100

Source: Brown: 1983: 18.

Brown (Table 6) estimates there will be a 56% decline in demand for units from the last semi-decade (1976-81) to the one twenty years later and that the rental share of this shrunken demand will only be 26% as compared to 47% in the recent period. Some U.S. forecasts depict an even more dramatic reduction in the net demand for rental housing over the same period; one respected U.S. source estimates that rental households will account for only 3.2 percent of the net increase in households during the 1990's. (Joint Center for Urban Studies; 1982: 20). The projected reductions in the growth of renter households also, of course, translates into a reduction of demand for structure types primarily associated with rental occupancy. For example, the Matthews Report estimates that the required number of apartment unit starts will decline steadily from

about 85 to 90 thousand per annum in the 1970's to around 20,000 per year in the early Nineties or from about 40 percent share to a 14 percent share.⁴⁵

These projections could, of course, be substantially in error; demographers greatly underestimated the rate of household formation over the past twenty years. However, most forecasts are based upon some continuance of the long run trend to increased headship rates and smaller household size. The average number of persons per household in Canada has declined from 5 persons at the beginning of the century to 4 in 1951, 3.5 in 1971, and 2.9 in 1981; (Statistics Canada, 1983). Brown forecasts a further decline to 2.5 by the end of the century (Brown: 1983: 15). While it is possible that this is too conservative an estimate the greater risk to the veracity of his household formation forecast is the possible reversal of this trend; this would produce fewer but larger, and probably more affluent households, who are more likely to elect ownership. In this scenario net demand for rental housing could be virtually nil in the out years of this century. On the other hand, the soft demand implicit in substantially lower rates of household formation if combined with continued expectations of high real interest rates and inadequate means for hedging interest rate risk could diminish the demand for ownership and produce larger rental shares than usually projected. Also it may well be that immigration rates are underestimated in most forecasts of household formation.

Consequently, the outlook for the remainder of the Eighties (and the Century) is hampered by uncertainties with respect to headship rates and tenure choice incentives in particular. However, the overriding impact of the demographic features point to a substantial reduction in the net demand for rental housing. It is possible that this smaller market scale could highlight market imperfections for which government intervention is desirable; it seems more likely, however, that the path to reducing this risk is through reducing

existing interventions (rent control, land use controls, etc.) that tend to enhance imperfections rather than to attempt to override existing policies with major new initiatives.

The greatest risk from a rental housing stimulus program is that it may succeed in generating a substantial excess supply overhang in many markets. As we have seen the MURB, ARP and AHOP programmes all tended to induce production of units that failed to match the composition of demand; the likelihood of this occurring in quantity is much greater in a smaller low growth market. In a world characterized by concern over low rates of capital formation, productivity, and economic growth, the creation of an excess supply of housing would be particularly wasteful. It would be unfortunate if policy actions of the Eighties produced a chronic excess supply housing crisis in the Nineties generating pressures for federal government and CMHC intervention to design and implement policies to reduce the size of the housing stock.

VIII. POLICY IMPLICATIONS AND RECOMMENDATIONS

Recent proposals for senior government action to stimulate the rental housing market have been explicitly or implicitly based upon the assumption of market failure, i.e., the proposition that market price adjustments required to maintain investor incentives have not been forthcoming. Our review of the evidence casts much doubt on the accuracy of this market failure proposition. It is clear that contentions based upon the time path of rents and/or net operating income in an inflationary era do not provide credible evidence of market imperfections. The determination of investors' demand prices in such an environment is based upon a complex interaction of inflationary expectations with the tax laws and financing options and is affected by various dynamic interactions between prices and occupancy levels as well as by determinants of

long run equilibrium. It is not possible to conclude with any certainty that the market efficiently responded in price and supply adjustments to the unusual market pressures generated by the uncertain, inflationary environment of the Seventies; however, the broad sweep of observed results appears consistent with the hypothesis of an efficient market. This is corroborated by the sharp upward movement in rents and net operating income that appears to have occurred (where permitted), as it should have in the context of efficient market responses, to the vastly changed level of real interest rates and nature of economic expectations since 1979.

The most disturbing symptom of potential market imperfections has been extended periods of extremely low vacancy rates in many Canadian rental housing markets. It is plausible to expect that inflationary factors and forecasts of sharply reduced demand in the future would have produced a decline in the long run equilibrium (natural) vacancy rate. However, some of the very low vacancy rates observed are out of the range of credible natural rates; if not a product of market failure in the rental housing market these must reflect externally imposed constraints on the rental market. The most plausible external market constraint is the failure of real estate financing markets to fully adapt loan instruments or underwriting guidelines to an inflationary environment or provide other devices for effective hedging of interest rate risk in a volatile rate climate. Government policies which have the right timing and are potentially quantitatively significant include especially tax policies, rent control and a variety of programs which induced household tenure switches from rental to ownership. Continuing government policies controlling land uses and densities along with building code restrictions may have a particularly important supply restricting impact in an uncertain, high real interest rate environment. Consideration of more traditional rationales for housing policy reinforced

concern over mortgage financing inadequacies and the potentially harmful impacts of rent control, land use controls and building codes. Such a review does not suggest a basis for new subsidy ventures by senior government with the possible exception of a refined, carefully focussed housing payment or rent supplement program directed at special disadvantaged groups.

When placed in the context of the powerful demographic forces shaping the remainder of this century, this overview argues strongly against any broadly based governmental initiatives to subsidize additions to the stock of housing in general as well as to the rental housing stock in particular. This does not mean, however, that the federal government and CMHC should adopt a passive, detached attitude toward rental housing. The present review does suggest governmental actions that would be desirable in this sector; however, these initiatives would be framed in the context of a substantially different orientation to housing policy than that which has characterized the past several decades. The principal areas of action suggested by our analysis are as follows:

1) Taxes

The essential problems with tax policy have been i) uncertainty about what the rules will be, ii) increasing real tax burdens from inflation and iii) the tax bias toward homeownership.

It would be helpful if the federal government could take a long run view with respect to tax policy and codify the rules in a stable set of underlying principles and laws; it is particularly desirable to avoid the sharp shifts in policy which characterized the MURB shelter history.

Incentives produced by up front, soft cost tax deductions or credits tend to induce myopic investor decisions based on immediate tax shelter benefits rather than the longer run economics of real estate investments. Investors

would be encouraged to focus upon the essential economics if tax incentives were shifted to forms which reduced uncertainty and tended to stabilize after-tax returns in the longer run if contingencies such as high rates of inflation should recur. In this context, defining Capital Consumption Allowances on a replacement rather than an historic cost basis and eliminating taxation of nominal capital gains would be positive incentives.

Correcting the tax system bias toward ownership obviously involves great political difficulties. Perhaps the most politically palatable possibility in this regard would be to introduce a capital gains tax on owner-occupied residences based on real gains only; this might be most easily accomplished at the same time the real gains principle is introduced in the taxation of rental property investments.

2) Financial Markets and Instruments

Our review indicates that programmes subsidizing investment in residential properties through interest reduction or other forms of financing assistance should be phased out within a fixed and reasonably short period of time. CMHC efforts in the debt financing sector should focus upon two areas a) research into and education of the financing, investment and developer/builder sectors with respect to i) optimal design of market oriented loan instruments and ii) hedging alternatives available in options and futures markets, and b) introduction of hedging devices or facilities such as mortgage rate insurance which appear to require government initiatives because of the nature of risks, economies of scale or the cost of information. To date such efforts have mostly focussed upon home mortgage financing issues; there should be a more conscious effort in this context to address the requirements of investors in rental housing.

3) Rent Supplements

As a general proposition income redistribution should be accomplished through general income transfers and not via in-kind housing allowances. The case for in-kind transfers has eroded as crowding has been virtually eliminated as a Canadian housing problem and substandard housing units have been largely eliminated from the Canadian housing stock. Given that individual decisions affecting the number and size composition of households generated from a given population appears to have become highly sensitive to economic factors, including government housing subsidy programmes, and given that there exists no visible or imaginable public policy objective with respect to the size or composition of households to replace the fulfilled target of undoubling families, generalized housing subsidy programmes are deprived of any foundation.

The recommendation that CMHC and the federal government phase out most existing income subsidy and direct supply as well as mortgage subsidy programmes, will, if implemented, allow these entities to concentrate on assisting local governments with those disadvantaged in the market place such as the frail elderly, handicapped, disabled and single women with children who possess very limited economic resources. Not only is it important for a basically free enterprise system to develop compassionate and effective means of dealing with the needs of those who are unable to fully cope in the free market environment, but it is important for policy formulation to recognize that some dependent groups, e.g., the elderly with special needs, can be expected to grow very substantially over time. As the scale of such groups grows, their needs may be more effectively met by market responses; in the meantime, government involvement in the housing and related markets is required. For some of these households, rent supplements may be more effective than general income assistance in establishing their credibility with landlords in a specialized segment of the rental housing market.

4) Rent Control and Land Use Controls

In the past federal government housing policy initiatives have sometimes been consciously designed to offset the impacts of other government interventions. For example, the Assisted Rental Programme was deliberately introduced to offset the negative impacts of (then) recently introduced rent control programmes. Although there may have existed special situations where such action could be justified, in the context of the 1980's this offsetting principle ought to be abandoned and replaced by the opposite principle that rental housing subsidy and incentive programmes are only available to areas where provincial and local governments have provided a positive climate for investment in rental residential property.

In the case of rent control the federal government bears a special responsibility in acting to eliminate these programmes since rent control was introduced in most provinces as a part of the federal government anti-inflation guidelines. Where the federal government offers rent supplement payments, tax shelter incentives, mortgage insurance, mortgage rate insurance or other forms of subsidies or incentives to rental housing the applicability of these policy instruments should be limited to housing units which are free of rent control. If it is constitutionally permissible to widen the net to, for example, include all rental property loans made by federally chartered institutions, such action would be desirable. While rent review designed to deal with unique situations is a valid process, for rents to make the adjustments required in the economic circumstances of the Eighties it is critical that rent controls be promptly phased out.

Although it will be more difficult to define appropriate criteria in this case, CMHC and other federal agencies involved should focus upon the development of standards which will allow the same programme contingency principles to be applied to land use controls, particularly those relating to

the development of multifamily residential structures and administration of code requirements. In an era of low growth in population and households, there ought to be much less federal concern over localities who follow conscious 'no growth' or exclusionary policies; however, federal assistance ought, at the same time, to be restricted to communities open to relatively unfettered market determined levels of rental housing in general and residential densities in particular. Federal incentives are particularly inappropriate in areas where as a result of land use controls these incentives are dissipated in higher land prices rather than production of the desired type of units.

5) Research and Data Needs

Dealing effectively with policy issues in the rental housing market context requires a continuing, and in some areas, enhanced effort on the part of CMHC and the federal government generally to initiate and to fund research and data collection activities. Among the research activities suggested by the above recommendations are efforts directed at determining optimal ways for investors in rental properties to hedge interest rate and cash flow risks, at identifying household characteristics which may render rent supplements a more effective social policy than general income assistance, and at defining eligibility requirements for federal incentives and subsidy programs in the context of sufficiently liberal land use controls. The land use control standards may be based, in part, on analyses of the effect of subsidy programmes on the prices of sites authorized for multifamily residential housing.

In addition, any readers of this paper will, no doubt, share the author's distress at the disproportionate number of instances in which empirical evidence is limited to U.S. sources. For the most part this dependence upon U.S. results

does not reflect a shortage of skilled housing researchers in Canada, although governmental and real estate industry initiatives to increase academic programmes in this area would help augment the supply of relevant studies. The primary deficiency in Canada, however, is the relative paucity of data sources available to researchers. In the present context this is particularly true with respect to household data; many of the U.S. citations in this paper represent studies based on household panel data including the Annual Housing Survey produced through cooperative efforts of U.S. federal government agencies and experimentally designed samples such as those utilized in the Housing Allowance experiment studies. Better policy depends upon better information; in this area this includes information on household tenure choices, determinants of housing expenditures and balance sheet as well as income data. Higher quality data will be especially important to devising methods of effectively serving the basic needs of the truly disadvantaged. CMHC and Statistics Canada should initiate a joint effort to upgrade the household information base.

